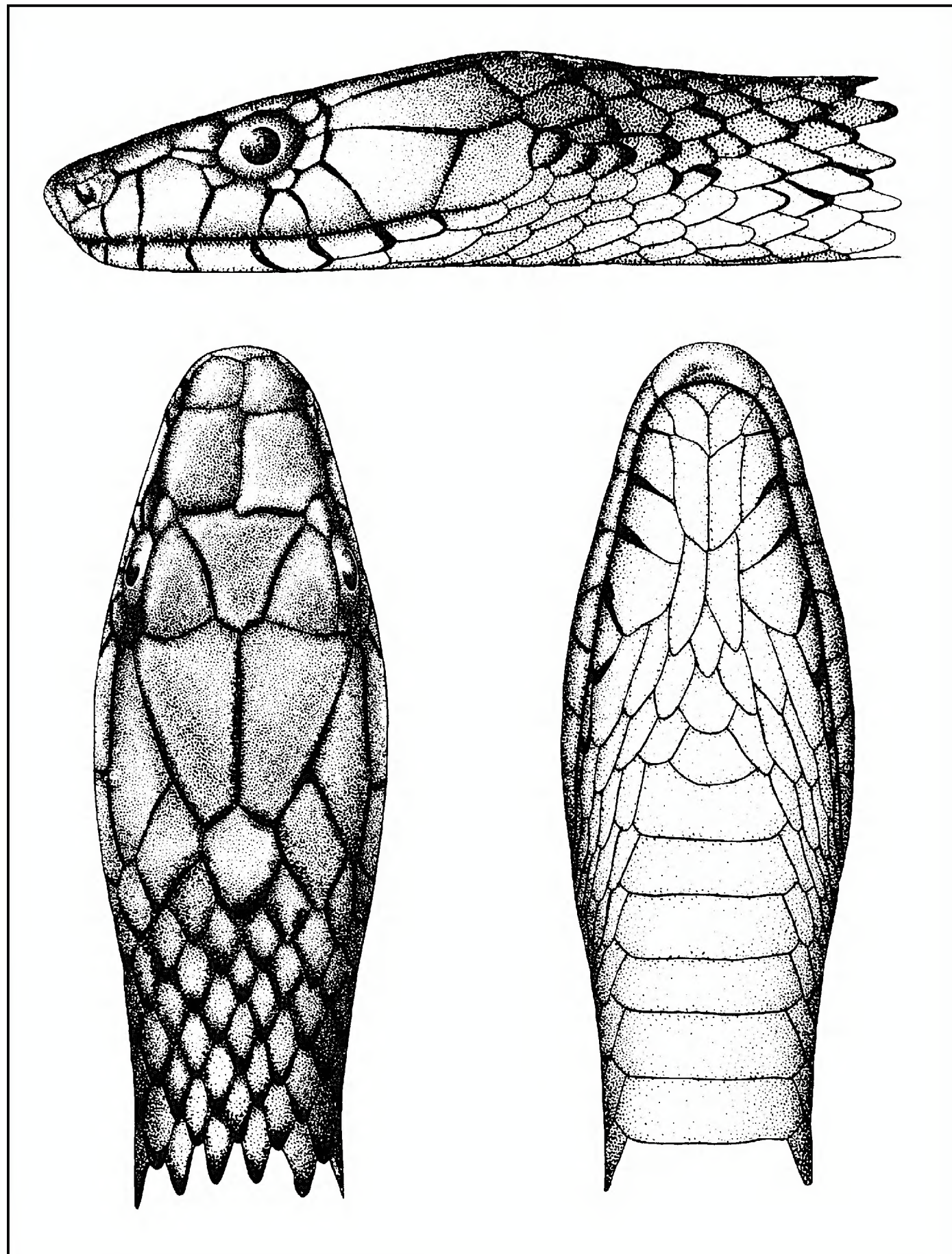

BULLETIN

of the

Chicago Herpetological Society



Volume 46, Number 7
July 2011



BULLETIN OF THE CHICAGO HERPETOLOGICAL SOCIETY

Volume 46, Number 7

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The Bulletin of the Chicago Herpetological Society (ISSN 0009-3564) is published monthly by the Chicago Herpetological Society, 2430 N. Cannon Drive, Chicago IL 60614. Periodicals postage paid at Chicago IL. **Postmaster:** Send address changes to: Chicago Herpetological Society, Membership Secretary, 2430 N. Cannon Drive, Chicago IL 60614.

Notes on the Herpetofauna of Western Mexico 5: An Update of Herpetofauna in the Oak Forest of Huaxtla, Zapopan, Jalisco, Mexico

Daniel Cruz-Sáenz*^{2,3}, David Lazcano³ and Leticia Ontiveros-Esqueda¹

Abstract

To update the estimate of species richness of amphibians and reptiles in the biotic community known as Huaxtla, in the municipality of Zapopan, Jalisco, we reviewed existing literature concerning species previously registered on the site and conducted monthly sampling over a period of 19 months. Here we report a list of 36 species of amphibians and reptiles. We emphasize the importance of this site due to its location in a transition zone from tropical deciduous forest to evergreen oak forest, enhancing its species diversity.

Resumen

Con la intención de actualizar y dar a conocer la riqueza de especies de anfibios y reptiles en la comunidad conocida como Huaxtla, en el municipio de Zapopan Jalisco se revisó literatura sobre las especies previamente registradas en el sitio y se realizaron muestreos mensuales en por un periodo de 19 meses teniendo finalmente un listado de 36 especies de anfibios y reptiles. Además queremos enfatizar su importancia como un sitio altamente rico y diverso por su transición del bosque tropical caducifolio a encinar, aumentando su diversidad específica.

Introduction

The relationship or interdependency between oak forests and herpetofauna has been better documented in the United States of America than in Mexico (e.g., Block and Morrison, 1991, 1998; Cain, 1996; Tietje and Vreeland, 1997; Gibbs, 1998; Cromer et al., 2002; Keyser et al., 2004; Rittenhouse and Semlitsch, 2007; Rittenhouse et al., 2008). This interdependency is habitat-specific and herpetofaunal species may be strongly dependent on microhabitat as well as plant community.

As an example of herpetological diversity and oak forests, Flores-Villela et al. (2010) mention that the herpetofauna of the Central Highlands of Mexico is extremely diverse and has a high percentage of endemic species. They point out that the majority of species in this region are found at moderate elevations, from 1,000 to 2,500 m, where the dominant plant communities are oak and coniferous forests.

Similar results were documented by Lavín-Murcio and Lazcano (2010) for the Sierra Madre Oriental where there is a high degree of endemism and various plant associations involving *Quercus* species are present, such as montane moist forest (*Pinus-Quercus* or *Quercus-Pinus*) and lower montane dry forest (*Juniperus-Quercus* or *Pinus cembroides-P. edulis*). A very important feature of most oaks, and particularly those found in mountainous areas, is fire. After a fire, involving various plant associations, oaks colonize the burned areas relatively easily. Oaks generally require fire to extend their propagation areas, depending on the dynamics, characteristics of the dominant species, and the climatology of the region (Christensen, 1985; Lorimer et al., 1994; Hom, 2003; Miller et al., 2004; Dey, 2002). The consequences of opening these areas facilitates the

recolonization of reptiles species from neighboring forests (Mushinsky, 1985; Mitchell, 1994; McLeod and Gates, 1998; Greenberg, 2002; Keyser et al., 2004). Healthy management programs of oak forests will enhance regeneration of the herpetofauna.

According to the latest estimate, the number of species of oaks in the world is between 400 and 500 (Nixon et al., 1997; Manos et al., 1999). There is a great diversity of oaks in Mexico (Zavala, 1990; Bonfil, 1993; Nixon, 1993), with an estimated 161 species according to Valencia-Ávalos (2004), of which 107 are endemic. The Mexican oaks are partitioned into three sections: *Lobatae* (red oaks with 71 species of which 61 are endemic); *Quercus* (white oaks, with 84 species of which 47 are endemic); *Protobalanus* (intermediate oaks, with four species, one of which is endemic).

There is an unknown degree of hybridization among Mexican species of oaks (González-Rodríguez et al., 2004; Tovar-Sánchez and Oyama, 2004). It has been hypothesized that plant hybrid zones are centers of elevated biodiversity (Whitham et al., 1994), but depending on the taxonomic group this could be higher (Whitham et al., 1994) or lower (Boecklen and Spellenberg, 1990; Campbell and Boecklen, 2002) in number compared to their parental plants. This has not been documented in Mexico, even though it is the second center of oak diversity in the world.

The Mexican states with the highest oak diversity are Chihuahua, Jalisco, Nuevo León, Oaxaca and Veracruz. Mexican oak species grow at elevations ranging from 0 to 3,500 m; however, they are most abundant between 1000 and 3,000 m (Valencia-Ávalos, 2004). One important factor is that Mexico is

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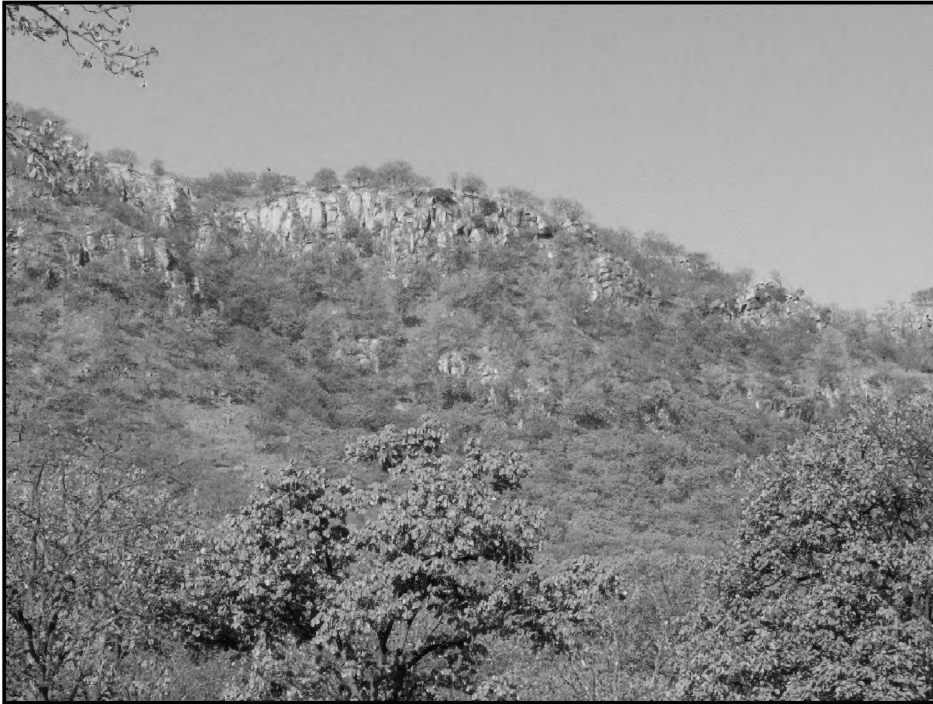


Figure 1. Looking down at an evergreen oak forest community. Photograph by Daniel Cruz-Sáenz.

a center of diversification for oaks, especially in the mountain areas (Govaerts and Frodin, 1998). Their conservation is extremely vital, but unfortunately they are important in the lumbering economy (González-Villarreal, 1986; Valencia-Ávalos, 1995) and the ecological value of oaks is not taken into account.

Two of the most diverse states for oaks are Oaxaca and Jalisco. There are roughly 45 species, with two endemic for the states; this high diversity is due to the convergence of the floras of the Sierra Madre Occidental, the Sierra Madre del Sur, and the occidental portion of Transverse Volcanic Belt (González-Villarreal, 1986). The predominant plant communities in mountain zones in Mexico are oak forests—covering 5.5% of the entire country (Rzedowsky, 2006), and about 17.8% of Jalisco (Flores-Villela and Gerez, 1994).

Mexico is also recognized as having a high richness in species of reptiles and amphibians (Flores-Villela, 1993). The state of Jalisco alone has about 200 species of amphibians and reptiles (Cruz-Sáenz et al., 2009a). Tropical deciduous forest is the vegetation type with the highest richness of reptiles in Jalisco (Cruz-Sáenz et al., 2009b). Some of these forests border other forest communities such as oak, pine, etc. This is the case in the study area, where the proximity of the two forest types has shifted some of the species into the evergreen oak forest.

However all of this diversity is at risk due to poor urbanization planning and overexploitation of natural resources within the Sierra of San Esteban, where Huaxtla is located. Currently the area is being heavily impacted due to its proximity to the metropolitan area of Guadalajara. Vast amount of land is being converted to housing tracts, and natural areas are being decimated, fragmenting and isolating many of the species present. Due to these rapid changes, it is vital to determine the herpetological richness, and what will be lost in the coming decades. Huaxtla is an important refuge for many species one of which is the threatened and endemic lizard *Xantusia sanchezi*, representing the southernmost distribution of the species (Cruz-Sáenz and Lazcano, 2010). Huaxtla is an important site because it is an ecotone between the tropical deciduous forest/*bosque caducifolio* (in the interior in the Santiago river canyon) and the evergreen oak forest/*encinar* (on top of the canyon) communities



Figure 2. Hillside transition zone between evergreen oak forest and tropical deciduous forest communities. Photograph by Daniel Cruz-Sáenz.

resulting in the high richness of the herpetofauna.

Study site

Together with its variety of topographic, orographic and climate characteristics, the state of Jalisco provides an extensive range of habitats that contribute to its wide biological diversity. The state harbors 13 different plant communities with deciduous forest/*bosque caducifolio* covering 19.6% of the state and evergreen oak forest/*encinar* covering 18% (Rzedowski and McVaugh, 1966; Flores-Villela and Gerez, 1994).

The evergreen oak forest community is composed of the following tree species: elephant tree (*Bursera multijuga*), Indian-lavender (*Bursera penicillata*), *Bursera kerberi*, negrito (*Vitex pyramidata*), *Quercus resinosa*, net-leaf oak (*Quercus magnoliifolia*), Cochi oak (*Quercus subspathulata*), littleleaf false tamarind (*Lysiloma acapulcense*), coffee bush (*Leucaena macrophylla*) and sweet pepperbush (*Clethra alnifolia rosea*).

The deciduous forest community comprises the following species: bastard cherry (*Bumelia persimilis*), copal (*Bursera bipinnata* and *B. copallifera*), palo mulato (*Bursera grandifolia*), *Bursera kerberi*, Indian-lavender (*Bursera penicillata*), *Bursera schlechtendalli*, pochote (*Ceiba aesculifolia*), pega



Figure 3. Tropical deciduous forest community in the dry season. Photograph by Daniel Cruz-Sáenz.



Figure 4. Location of study site, Huaxtla, Zapopan, Jalisco, Mexico.

hueso (*Euphorbia tanquahuete*), *papelio* (*Jatropha cordata*), *carne de venado* (*Leucaena esculenta*), *quebracho colorado* (*Lysiloma acapulcense*), *cuajilote* (*Pseudobombax palmeri*), *árbol de tempisque* (*Sideroxylon capiri*) and *pitayo* (*Stenocereus queretaroensis*).

Huaxtla is located in northern Jalisco, UTM 667929, 2316292, at 1213 m above sea level. It is within the municipality of Zapopan (an area of 1,163.63 km²) and is 20 km northwest of the Guadalajara Metropolitan Area. Access is by means of Federal Highway # 23 to Colotlán. Mountains here form part of Sierra de San Esteban; dominant vegetation is oak forest, with some patches of tropical deciduous forest on a few slopes and in ravines.

A study proposing Santiago River Canyon as a natural protected area was conducted in 2004. Here a total of 10 amphibian and 43 reptile species were reported for the canyon that harbors a tropical deciduous forest as the principal plant community (P.O.E.J., 2004).

Another study was conducted near our study site for the natural protected area of Nixticuil-San Esteban-El Diente (BENSEDI) in 2008. A total of 7 species of amphibians and 11 reptiles were registered and the dominant plant community in the area is *encinar* forest (P.O.E.J., 2008).

The fauna of Huaxtla is composed of six species of amphibians, 20 species of reptiles (Cruz-Sáenz et al., 2008), 34 species

of birds (Maya-Elizarraras et al., 2008), and 20 species of mammals (Godínez-Navarro et al., 2008).

There are two plant community types: the tropical deciduous forest in the interior of the Santiago river canyon and the *encinar* forest on top of canyon.

Material and methods

We divided the research into two strategies. The first was to review the literature in search of previous studies conducted in Huaxtla. The second was field work in search for herpetofauna at this locality. The field work was conducted in an *encinar* forest; we intensively searched for amphibians and reptiles in all the possible places to be found: under rocks, logs, bark, trees, crevices, litter and in ponds.

Field work was conducted for 19 months, from August of 2009 to March of 2011.

The common names were assigned using the nomenclature of Liner and Casas-Andreu (2008), the systematic arrangement and the endemism are from Flores-Villela (1993) and Frost et al. (2006), and the status of protection is from NOM-059-SEMARNAT-2010 (SEMARNAT, 2010).

Results

We found just two publications about this area, Cruz-Sáenz et al. (2008) and Cruz-Sáenz et al. (2010) in which 26 species were registered, 6 amphibians and 20 reptiles. In our field study we found 10 additional species of herpetofauna, 3 amphibians and 7 reptiles. With these new species this area currently has 36 species of herpetofauna: 9 amphibian species contained in 1 order, 5 families and 7 genera, and 27 reptile species contained in 1 order, 11 families and 20 genera. (Table 1).

Of these species, 2 amphibians and 8 reptiles are under a protection status and 4 amphibians and 14 reptiles are endemic to Mexico.

We classified the species according to their affinity to a plant community. This affinity was taken from the following field guides: Chamela Herpetological Field Guide (Ramírez-Bautista, 1994), Costa de Jalisco (García and Ceballos, 1994), and Bosque



Figure 5. A western lyre snake, *Trimorphodon biscutatus*, found in the evergreen oak forest community. Photograph by Daniel Cruz-Sáenz.



Figure 6. A canyon treefrog, *Hyla arenicolor*, from the evergreen oak forest community. Photograph by Daniel Cruz-Sáenz.

Table 1. Amphibian and reptile species from Huaxtla. Protection categories based on *Norma Oficial Mexicana* (SEMARNAT, 2010): A = *Amenazada* (threatened); P = *En Peligro* (endangered); Pr = *Protección Especial* (special protection). Endemism: EM = endemic to Mexico; NE = not endemic to Mexico. Affinity: TDF = tropical deciduous forest; OF = evergreen oak forest. Scientific and common names are as indicated by Flores-villela and Canseco-Márquez (2004) and Liner and Casas-Andreu (2008)

Species	Common name	Newly registered	Protection category	Endemism	Affinity	
					TDF	OF
Amphibians						
<i>Ollotis occidentalis</i>	Pine toad		—	EM	X	X
<i>Hyla arenicolor</i>	Canyon treefrog		—	NE		X
<i>Smilisca fodiens</i>	Lowland burrowing treefrog	●	—	NE		X
<i>Hypopachus variolosus</i>	Sheep frog		—	NE		X
<i>Craugastor augusti</i>	Barking frog		—	NE	X	
<i>Craugastor hobartsmithi</i>	Smith’s pigmy tropical frog	●	—	EM	X	X
<i>Craugastor occidentalis</i>	Taylor’s barking frog	●	—	EM		X
<i>Syrrhophus modestus</i>	Blunt-toed chirping frog		Pr	EM		X
<i>Lithobates forreri</i>	Forrer’s leopard frog		Pr	NE	X	X
Reptiles						
<i>Phyllodactylus lanei</i>	Lane’s leaf-toed gecko		—	EM	X	
<i>Phyllodactylus tuberculosus</i>	Yellow-bellied gecko		—	NE	X	
<i>Ctenosaura pectinata</i>	Western spiny-tailed iguana		A	EM	X	
<i>Elgaria kingii</i>	Madrean alligator lizard	●	Pr	NE		X
<i>Sceloporus clarkii</i>	Clark’s spiny lizard		—	NE	X	
<i>Sceloporus horridus</i>	Rough lizard		—	EM		X
<i>Sceloporus melanorhinus</i>	Black-nosed lizard		—	NE		X
<i>Sceloporus scalaris</i>	Light-bellied bunchgrass lizard	●	—	NE		X
<i>Sceloporus torquatus</i>	Torquate lizard		—	EM	X	X
<i>Sceloporus uniformis</i>	Yellow-backed spiny lizard		—	NE	X	
<i>Urosaurus bicarinatus</i>	Tropical tree lizard		—	EM	X	
<i>Anolis nebulosus</i>	Clouded anole		—	EM	X	X
<i>Plestiodon callicephalus</i>	Mountain skink		—	NE		X
<i>Aspidoscelis communis</i>	Giant whiptail		—	EM	X	X
<i>Aspidoscelis gularis</i>	Spotted whiptail	●	—	NE	X	
<i>Xantusia sanchezi</i>	Sanchez’s night lizard		P	EM	X	
<i>Coluber mentovarius</i>	Neotropical whipsnake		A	EM	X	X
<i>Coniophanes lateritius</i>	Stripeless snake	●	—	EM	X	
<i>Hypsiglena torquata</i>	Collar nightsnake		Pr	NE	X	X
<i>Imantodes gemmistratus</i>	Central American tree snake	●	—	NE	X	
<i>Rhadinaea hesperia</i>	Western graceful brownsnake		Pr	EM	X	
<i>Sonora michoacanensis</i>	Michoacan groundsnake		—	EM	X	
<i>Tantilla bocourti</i>	Bocourt’s blackheaded snake	●	—	EM		X
<i>Trimorphodon biscutatus</i>	Western lyresnake		—	NE	X	X
<i>Trimorphodon tau</i>	Mexican lyresnake		—	EM	X	X
<i>Micruroides euryxanthus</i>	Sonoran coralsnake		A	NE	X	
<i>Crotalus basiliscus</i>	Mexican west coast rattlesnake	●	Pr	EM	X	X



A Mexican west coast rattlesnake, *Crotalus basiliscus*, waiting for its next meal within leaf litter from the evergreen oak forest community. Photograph by Daniel Cruz-Sáenz.

La Primavera (Reyna-Bustos et al., 2007).

Conclusion

We want to emphasize the relevance of Huaxtla, its amphibian and reptile species richness, and the urgent need to preserve this richness and protect this area from urbanization.

The study area is an interesting ecotone between tropical deciduous forest and evergreen oak forest. We have noted the shifting of herpetological species within the ecotone. There are two explanations why species are moving within this ecotone:

the particular conditions within each different plant communities are changing; temperatures are elevating in the Santiago River Canyon due to climate change. The effect of climate change on reptiles has been documented in Mexico; with increasing temperatures species are becoming extinct (Sinervo et al., 2010). Due to this factor it is also necessary to conduct thermoregulation studies of the herpetofauna in both plant communities to detect trends and elucidate the movement of species.

This site was recently disturbed by installation of electric transmission line from Federal Commission of Electricity to nourish the growing Guadalajara Metropolitan Area, now with 4,434,252 inhabitants; an extension of 2,734.04 km², and with an urbanized extension of 719.14 km² (INEGI, 2010). To install the line a portion of the *encinar* forest was totally cut.

Another important conservation factor is that it's the site for the most southern distribution of the endemic and endangered lizard *Xantusia sanchezi*.

Acknowledgments

We thank CONACYT for their supporting scholarship given to the main author, CONACYT-229132, and SEMARNAT for issuing a collecting permit Oficio Num, SGP/DGVS/ 06423/09. We thank Dr. Robert Bezy for reviewing this manuscript. We also thank all our field partners of this project: Ángeles Penilla, Eduardo Gudiño-Larios, Edgar Flores-Covarrubias, José Francisco, Arquimedes Alfredo Godoy Gonzalez, Alejandra Cueto, Francisco Javier Muñoz Nolasco and Miguel Ángel López Cuéllar

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Scenes from Show and Tell
Photographs by Tlaloc Soria



Deb Krohn frequently uses Tidbit, her boa constrictor, in the many educational programs she gives. Deb amused everyone by relating how one of her snakes got bitten by a 2-year-old at her last program.



Rising stars—Sri Lankan star tortoise brought by Jim Foster (right) and Indian mainland star tortoise brought by Noah Cohen (left). Both are the same species (*Geochelone elegans*) but Sri Lankan specimens are typically larger and have somewhat different shell markings.



Lawrence Huddleston spoke about his young savannah monitor, *Varanus exanthematicus*.



Rachel Fessler brought a box turtle that was given to her by someone who no longer wanted it. It came complete with the 10-gallon tank it had been living in and the name “Myrtle the Turtle.”



Ron Ermilio brought two spiny-tailed monitors, or ackies, *Varanus acanthurus*, a small Australian species that grows to no more than 2 feet in total length.



Elena Moss’s Japanese rat snake, *Elaphe climacophora*, was returned to her at the meeting after doing his duty on a breeding loan.



Jason Hood shared his fascination and admiration for the Central and South American snakes of the genus *Pseustes*. Here he holds one of his two male *Pseustes sulphureus*—the giant bird-eating snake or yellow-bellied puffing snake.



As usual at Show and Tell in recent years, Dan Nathan set up a display for many of his rescued green iguanas.



Josh Baity talked about his ball python breeding project and proper housing for ball pythons.



Rich Lamszus spoke about his “blizzard” corn snakes and their recent babies.



Aaron LaForge brought two animals native to the South Pacific. In his right hand he holds a rough-snouted giant gecko, *Rhacodactylus trachyrhynchus trachycephalus*; in his left is a Solomon Island tree boa, *Candoia bibroni australis*.

Herpetology 2011

In this column the editorial staff presents short abstracts of herpetological articles we have found of interest. This is not an attempt to summarize all of the research papers being published; it is an attempt to increase the reader's awareness of what herpetologists have been doing and publishing. The editor assumes full responsibility for any errors or misleading statements.

STRESS IN CAPTIVE-REARED AMPHIBIANS

A. K. Davis and J. C. Maerz [2011, J. Herpetology 45(1):40-44] note that larval amphibians are increasingly being reared for conservation initiatives to bolster declining populations. Few researchers, however, have asked whether reared individuals are functionally equivalent to their wild counterparts. Compared with those in the wild, amphibians reared in captivity may develop in relatively stress-free environments, because they are usually fed ad libitum, raised in the absence of predators and pathogens and in controlled environments. Thus, with few challenges throughout development, would their resting stress levels or reactions to acute stressors be normal? This question was addressed by rearing *Lithobates sphenoccephalus* and *Ambystoma opacum* from eggs and 10-day-old larvae through to late larval stages in artificial pond environments and by determining their ratios of neutrophils (N) to lymphocytes (L) (two leukocytes that covary with stress hormones) before and after a standardized stressor. Similar samples were obtained from wild-caught larvae of equivalent developmental stages and from the same source pond. Baseline and stress-induced NL ratios of reared *L. sphenoccephalus* were statistically similar to those of wild individuals. In contrast, baseline NL ratios of reared *A. opacum* were slightly higher than those of wild individuals. In general, the magnitude of the leukocyte response to stress for both species (a 3-fold increase in NL over baseline), was similar to that of wild individuals, suggesting that captive-reared amphibians are capable of mounting a normal physiological stress response. Although this last point provides support for the use of captive-rearing for conservation and research purposes, the unusually high baseline NL ratios of reared salamanders will require additional research to determine the functional meaning.

KURDISTAN NEWTS

C. Schneider and W. Schneider [2011, Herpetozoa 23(3/4): 3-20] verified available information on the distribution of newts of the genus *Neurergus* in Iraq during an 11-day field trip to the autonomous province of Iraqi Kurdistan in spring 2010. Published localities for *Neurergus* in Iraq were visited insofar as access was possible. In situ observations including descriptions of the inhabited streams, life history and morphology data of the newts and an updated view of their approximate distribution are presented. Kurdistan newts fully corresponding to those described in 1916 by Nesterov under the names *Rhithrotriton derjugini* forma typica and *Rhithrotriton derjugini* var. *microspilotus* were each found in close vicinity to their type localities. Both newt forms were first records for Iraq since Nesterov's journey in 1914. *Neurergus derjugini derjugini* (Nesterov, 1916) and *Neurergus derjugini microspilotus* (Nesterov, 1916) [Syn. *Neurergus microspilotus* (Nesterov, 1916)] are proposed to constitute the valid names of these two taxa. Color pattern variations of *Neurergus crocatus* Cope, 1862, from different locations are described.

EXTREME COLOR VARIATION IN GARTERSNAKES

R. D. Mooi et al. [2011, Copeia 2011(2):187-200] report on the remarkable variation and frequency of color morphs within and among eight populations of the common gartersnake (*Thamnophis sirtalis*) in central Manitoba, Canada, and one on Isle Royale, Michigan, USA. Five color morph categories are identified, one melanistic and four scored on a qualitative scale based on expression of red pigment. In the most northern population (Jenpeg, 54.464°N, 98.115°W) and two island populations (George Island, Lake Winnipeg, 52.819°N, 97.620°W; Isle Royale, 48.102°N, 88.601°W), all five color morphs were expressed. The northernmost population also exhibited sexual color dimorphism, with female snakes expressing significantly more red than males. In contrast, two central and western populations showed very little variation, with only two of the most similar color morphs present. This study provides the first report of erythristic snakes in Manitoba, found in three separate locations around Lake Winnipeg. Melanistic snakes are also reported from three new localities in the province, all widely disjunct from previously identified sites around Lake Winnipegosis. Manitoban and Isle Royale populations are compared with color frequency data from sites in mainland Michigan and in Kansas. Color patterns among populations do not follow traditionally recognized zones of intergradation between *T. s. parietalis* and *T. s. sirtalis*. The extreme intrapopulational variation suggests that subspecies of *T. sirtalis* based on color are of questionable validity.

NICHE OVERLAP IN TWO MONITOR SPECIES

D. R. Sutherland [2011, Herpetologica 67(2):146-153] notes that dietary separation is an important means of differentiating ecological niches and avoiding interspecific competition between sympatric species. Congeneric species that overlap in geographic distribution provide an excellent opportunity to explore the mechanisms of coexistence. Two monitor lizards, *Varanus gouldii* and *V. rosenbergi* (Varanidae), are sympatric at a local scale in the northern Jarrah Forest of Western Australia. Both species are wide-ranging terrestrial predators of a similar size and may differentiate their ecological niche by utilizing alternative foraging strategies resulting in dietary separation. Because varanid lizards are an important group of terrestrial high-order predators in the Old World, any such separation may have important implications for faunal community structure. In total, 169 scat and stomach samples were analyzed revealing extensive dietary overlap between the species. Dietary intake was not distinguishable between species or related to individual body size. Invertebrates were most important in terms of frequency and volume, although reptiles, mammals and birds were also commonly identified. Dietary partitioning is not the mechanism allowing these congeneric varanid lizards to coexist.

Unofficial Minutes of the CHS Board Meeting, June 17, 2011

The meeting was called to order at 7:47 P.M. at the Schaumburg Public Library. Board members Lawrence Huddleston, Deb Krohn, Andy Malawy and Linda Malawy were absent.

Officers' Reports

Recording Secretary: Cindy Rampacek read the minutes of the May 13 board meeting and they were accepted with minor corrections.

Treasurer: Andy Malawy emailed the treasurers report. Mike brought up some issues with the check from the trust of Randi Scott, but it is all cleared up and we have deposited it. We received our invoice from UIC for the rental of the gym for 'Fest..

Membership Secretary: Mike Dloogatch read a list of memberships due to expire.

Sergeant-at-arms: Greg Brim reported that there were 34 people at the April meeting.

Publications Secretary: Aaron LaForge heard from Deb Krohn that we have the new phone. Our new number is 773-647-8162 and it has been updated on the website. She had nothing else to report. The phone number will need to be changed in a variety of places in our literature. Aaron said that the ReptileFest page will soon be updated with the 2012 dates.

Committee Reports

Shows:

- Notebaert, First full weekend of each month
- Argonne Labs picnic, July 16
- Museum of Science and Industry Members' Night, July 20
- SEWERFest, July 31

- Unity Fest at Marquette Park, September 10
- Unity Walk at Soldier Field, September 24
- NARBC Tinley Park, October 8 & 9
- Snake Day at the Milwaukee Public Museum, November 5

New Business

Nominating Committee: Jason appointed Jessica Tschampa to be the chair. Cindy Rampacek will be on the committee. Three more members are still needed for the committee.

Round Table

Cindy welcomed Jason's fiancée, Barbara Nieri.

Jessica has a new uromastix. It is a rescue and it needed a bit of TLC from the rockstar vet Steve Barten with the help of Jason making a caravan.

Mike mentioned that Arizona is burning. Miller Peak in the Huachuclas is on fire. Hopefully the monsoons will come soon and help control.

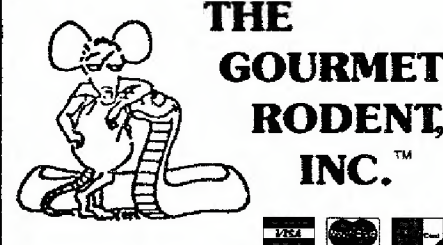
Nancy Kloskowski got the worst snakebite of her life the night before the board meeting from her big bullsnake that Jason hatched. He wouldn't let go and it took some work. But she still loves him.

Barbara says "Hi, everybody."

Jason mentioned that he and Barbara will be married in Florida this coming August.

The meeting was adjourned at 9:07 P.M.

Respectfully submitted by recording secretary Cindy Rampacek



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For sale: Australian herp books. *Graeme Gow's Complete Guide to Australian Snakes*, 1993, 171 pp., many color photos, identification, life history info, range maps, DJ, hardbound, excellent condition, \$75; *A Field Guide to Reptiles of the Australian High Country* by R. Jenkins and R. Bartell, 1980, 278 pp., many color photos, natural history info, DJ, hardbound, like new, \$35; *Snakes of Western Australia* by G. M. Storr, L. A. Smith and R. E. Johnstone, 1986, 187 pp., 24 color plates with up to 8 photos on each, drawings, range maps, description, distribution, derivation of scientific name, published by Western Australia Museum, softbound, as new, \$32. Sent postpaid. William R. Turner, 7395 S. Downing Circle W.; Centennial, CO 80122 telephone (303) 795-5128; e-mail: toursbyturner@aol.com

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UPCOMING MEETINGS

The next meeting of the Chicago Herpetological Society will be held at 7:30 P.M., Wednesday, July 27, at the Peggy Notebaert Nature Museum, Cannon Drive and Fullerton Parkway, in Chicago. **John Palis**, a consulting biologist from Jonesboro, Illinois, will speak on “Conservation status of flatwoods salamanders on the southeastern United States Coastal Plain.” Reticulated flatwoods salamanders (*Ambystoma bishopi*) and frosted flatwoods salamanders (*Ambystoma cingulatum*) — two closely-related salamanders endemic to the southeastern United States — have suffered rangewide population declines that mirror the loss of the highly-endangered longleaf pine ecosystem upon which they depend.

Speaking at the August 31 meeting will be **Carl J. Franklin**, biological curator and collections manager at the Amphibian and Reptile Diversity Research Center, University of Texas at Arlington. Carl will describe his experiences working with and searching for with the two-legged Mexican amphisbaenians of the genus *Bipes*.

The regular monthly meetings of the Chicago Herpetological Society take place at Chicago’s newest museum—the **Peggy Notebaert Nature Museum**. This beautiful building is at Fullerton Parkway and Cannon Drive, directly across Fullerton from the Lincoln Park Zoo. Meetings are held the last Wednesday of each month, from 7:30 P.M. through 9:30 P.M. Parking is free on Cannon Drive. A plethora of CTA buses stop nearby.

Board of Directors Meeting

Are you interested in how the decisions are made that determine how the Chicago Herpetological Society runs? And would you like to have input into those decisions? If so, mark your calendar for the next board meeting, to be held at 7:30 P.M., September 16 (there will be no board meeting in August), in the adult meeting room on the second floor of the Schaumburg Township District Library, 130 S. Roselle Road, Schaumburg.

The Chicago Turtle Club

The monthly meetings of the Chicago Turtle Club are informal; questions, children and animals are welcome. Meetings normally take place at the North Park Village Nature Center, 5801 N. Pulaski, in Chicago. Parking is free. For more info visit the CTC website: <http://www.geocities.com/~chicagoturtle>.

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